Attachment 1.

Draft Amendments to the Verification Procedure

NOTE: This document is printed in a style to indicate changes from the adopted regulation. All original language is indicated by plain type. The proposed amendments are shown in underline to indicate additions to the original language and ~~strikeout~~ to indicate deletions. The symbol "*****" means that the remainder of the text of the regulation for a specific section is not shown, but has been incorporated by reference, unchanged.

NOTE: Adopt Title 13, California Code of Regulations, sections 2700 through 2710, to read as follows:

Chapter 14. Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines

§ 2700. Applicability

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§ 2701. Definitions

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(3) "ALSF-1 and ALSF-2" mean high intensity approach lighting systems with sequenced flashers used at airports to illuminate specified runways during category II or III weather conditions, where category II means a decision height of 100 feet and runway visual range of 1,200 feet, and category III means no decision height or decision height below 100 feet and runway visual range of 700 feet.

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~~(13) "Emergency/Standby Engine" means an internal combustion engine used only as follows: (1) when normal power line or natural gas service fails; or (2) for the emergency pumping of water for either fire protection or flood relief. An engine operated to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded is not an emergency/standby engine.~~

(14) "Emergency Standby Engine" means a diesel engine operated solely for emergency use, except as otherwise permitted for maintenance and testing operations, emission testing, to provide power during a rotating outage, and initial start-up testing.

(15) "Emergency Use" means using a stationary diesel engine to provide electrical power or mechanical work during any of the following events and subject to the following conditions:
(A) The failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility,
(B) The failure of a facility's internal power distribution system,
(C) The pumping of flood water or sewage overflow,
(D) The pumping of water for fire suppression or protection,
(E) The powering of ALSF-1 and ALSF-2 airport runway lights under category II or III weather conditions.

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~~(19) "Portable Diesel-Fueled Diesel Engine" means a diesel-fueled diesel engine which is designed and capable of being carried or moved from one location to another and does not remain at a single location for more than 12 consecutive months. Engines used to propel mobile equipment or a motor vehicle of any kind are not portable engines. Examples of portable diesel-fueled engine applications include, but are not limited to cranes, pumps, welders, woodchippers, tactical support equipment (military), power generation sets, pile-driving hammers, service or work-over rigs, dredges or boats or barges, and compressors. The definitions in Title 13 California Code of Regulations Section 2452(g) and Section 2452(x) are incorporated by reference herein.~~

(21) "Portable Engine" means an engine designed and capable of being carried or moved from one location to another. Engines used to propel mobile equipment or a motor vehicle of any kind are not portable. Engines that meet the definition of a "stationary engine" are not portable. (See related definition for "stationary engine," Section 2701 (a) (24).) Indicators of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. A portable engine cannot remain at the same facility location for more than 12 consecutive rolling months or 365 rolling days, whichever occurs first, not including time spent in a storage facility. If it does remain at the facility for more than 12 months, it is considered to be a stationary engine. The definitions in Title 13 California Code of Regulations Section 2452(g) and Section 2452(x) are incorporated by reference herein.

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~~(22) "Stationary Diesel-Fueled Diesel Engine" means either a diesel-fueled diesel engine that is used in a piece of equipment that is designed to remain in one location for the duration of its useful life, or a diesel-fueled diesel engine that is used in a piece of equipment that can be moved from one location to another but remains in a single location for more than 12 consecutive months. Examples of stationary applications include, but are not limited, to electric power generator sets, grinders, rock crushers, sand screeners, cranes, cement blowers, compressors,~~

~~and water pumps. The definitions in Title 13 California Code of Regulations Section 2452(g) and Section 2452(x) are incorporated by reference herein.~~

(24) "Stationary Engine" means an engine that is designed to stay in one location, or remains in one location, and meets one of the following criteria:

(A) The engine or its replacement is attached to a foundation, or if not so attached, will reside at the same location for more than 12 consecutive months. Any engine that replaces engine(s) at a location, and is intended to perform the same or similar function as the engine(s) being replaced, will be included in calculating the consecutive time period. In that case, the cumulative time of all engine(s), including the time between the removal of the original engine(s) and installation of the replacement engine(s), will be counted toward the consecutive time period; or

(B) The engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or

(C) The engine is moved from one location to another in an attempt to circumvent the residence time requirements [Note: The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination.] The definitions in Title 13 California Code of Regulations Section 2452(g) and Section 2452(x) are incorporated by reference herein.

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§ 2702. Application Process

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(b) Proposed Verification Testing Protocol. Before formally submitting an application for the initial verification of a diesel emission control strategy, the applicant must submit a proposed verification testing protocol at the Executive Officer's discretion. The Executive Officer shall use the information in the proposed protocol to help determine whether the strategy uses sound principles of science and engineering to control emissions, the need for additional analyses, and the appropriateness of allowing alternatives to the prescribed requirements. The protocol should include the following information:

(1) Identification of the contact persons, phone numbers, names and addresses of the responsible party proposing to submit an application.

(2) Description of the diesel emission control strategy's principles of operation. A schematic depicting operation should be included as appropriate. It is the responsibility of the applicant to demonstrate that its

product relies on sound principles of science and engineering to achieve emission reductions.

(A) If, after reviewing the proposed protocol, the Executive Officer determines that the applicant has not made a satisfactory demonstration that its product relies on sound principles of science and engineering to achieve emission reductions, the Executive Officer shall notify the applicant of the determination in writing within 30 days of receipt of the proposed protocol. The applicant may choose to withdraw from the verification process or submit additional materials and clarifications. The additional submittal must be received by the Executive Officer no later than 60 days from the date of the notification letter.

(B) If, after reviewing the additional submittal, the Executive Officer determines that the applicant has not yet made a satisfactory demonstration that its product relies on sound principles of science and engineering to achieve emission reductions, the application shall be suspended. If an application has been suspended, it may only be reactivated at the discretion of the Executive Officer.

(C) If at any point in the verification process the Executive Officer has reason to doubt the scientific or engineering soundness of a product, the Executive Officer may require the applicant to submit additional supporting materials and clarifications. Any such submittals are handled as in subsection (B) above.

(3) Preliminary parameters for defining emission control groups that are appropriate for the diesel emission control strategy. The Executive Officer will work with the applicant to determine appropriate emission control group parameters.

(4) The applicant's plan for meeting the requirements of Sections 2703-2706. Existing test data may be submitted for the Executive Officer's consideration. The protocol must focus on verification of the diesel emission control strategy for use with a single emission control group.

(5) A brief statement that the applicant agrees to provide a warranty pursuant to the requirements of Section 2707.

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§ 2703. Emission Testing Requirements.

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(e)

(2) Off-road Engines and Equipment (including portable engines). For off-road diesel-fueled vehicles and equipment, the applicant must follow the steady-state test ~~cycle~~ procedure outlined in the ARB off-road regulations (California Code of Regulations, Title 13, Section 2423 and the incorporated California Exhaust Emission Standards and Test Procedures for New 2000 and Later Off-Road Compression-Ignition Engines, Part I-B). A minimum of three hot-

start tests must be conducted using the specified ~~for each appropriate~~ test cycle. Applicants may request that the Executive Officer consider alternative test cycles, as described in subsection (f).

(3) Stationary Engines. For stationary engines, the applicant must follow the steady-state test procedure outlined in the ARB off-road regulations ~~use the most appropriate off-road test cycle~~ (as referenced in (2) above). ~~representing the operating conditions of the application, with approval from the Executive officer.~~ A minimum of three hot-start tests must be conducted using the specified ~~for each appropriate~~ test cycle. Applicants may request that the Executive Officer consider alternative test cycles and methods, as described in subsection (f).

(f) Alternative Test Cycles and Methods. The applicant may request the Executive Officer to approve an alternative test cycle or method in place of a required test cycle or method. In reviewing this request, the Executive Officer may consider all relevant information including, but not limited to, the following:

(1) Test procedures specified in airborne toxic control measures adopted by the ARB, e.g. the Airborne Toxic Control Measure for Stationary Compression Ignition Engines,

(2) Similarity of average speed, percent of time at idle, average acceleration, and other characteristics to the specified test cycle or method and in-use duty cycle,

(3) Body of existing test data generated using the alternative test cycle or method,

(4) Technological necessity, and

(5) Technical ability to conduct the required test.

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§ 2704. Durability Testing Requirements

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Table 3. Minimum Durability Demonstration Periods

Engine Type	Minimum Durability Demonstration Period
On-Road	50,000 miles or 1000 hours
Off-Road (including portable engines) and Stationary	1000 hours
~~Stationary emergency generator~~ Stationary Emergency Standby Engines	500 hours

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(g) Test Run. The requirements for emissions reduction testing are summarized in Table 4, below.

(1) The diesel emission control strategy must undergo one set of emission tests before beginning and after completion of the service accumulation. Baseline testing with test repetitions as indicated in Table 4 must be conducted for either the initial test or the final test, but is suggested for both. If there are substantial test data from previous field studies or field demonstrations, applicants may request that the Executive Officer consider these in place of the initial emission tests.

(2) As an alternative to testing a single unit before and after the service accumulation period, the applicant may request that the Executive Officer consider the testing of two identical units, one that has been pre-conditioned and another that has completed the service accumulation period. In reviewing the request, the Executive Officer may consider all relevant information, including, but not limited to, the following:

(A) The effect of the diesel emission control strategy on engine operation over time. Strategies that cause changes in engine operation are likely not to qualify for this testing option.

(B) The quality of the evidence the applicant can provide to support that the two units are identical,

(C) Previous experience with similar or related technologies, and

(D) Whether the applicant is participating in the U.S. EPA verification process and has made an agreement with U.S. EPA to test two units.

(3) For strategies that include exhaust aftertreatment, engine backpressure and exhaust temperature must be measured and recorded on a second-by-second basis (1 Hertz) during at least one baseline run and each of the control test runs.

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§ 2705. Field Demonstration Requirements.

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(b) Test Period.

(1) For on- and off-road engines, and stationary engines not used in emergency generators, a vehicle or piece of equipment must be operated with the diesel emission control strategy installed for a minimum period of 200 hours or 10,000 miles, whichever occurs first.

(2) For stationary emergency ~~generators~~ standby engines, the emission control system must remain in the field for at least 30 days and operation must include:

(A) 12 maintenance runs (allowing for engine cool down between runs), and
(B) a minimum of two separate 4 hour sessions where the engine is operated under load (allowing engine cool down between runs).

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§ 2706. Other Requirements.

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§ 2707. Warranty Requirements.

(a) (1) Product Warranty.
(A) The applicant must warrant to all owners, for ownership within the warranty period and lessees, for lease contract within the warranty period, that its verified diesel emission control strategy is free from defects in design, materials, workmanship, or operation of the diesel emission control strategy which cause the diesel emission control strategy to fail to conform to the emission control performance level it was verified to, or to the other requirements of Sections 2700-2706, and 2710 for the minimum periods shown in Table 5, provided the operation of and conditions of use for the vehicle, equipment, engine, and diesel emission control strategy conform with the operation and conditions specified in the ARB's Executive Order.
(B) For each engine type and size listed in Table 5, the minimum defects warranty period is terminated by that listed event which occurs first. The warranty must cover the full repair or replacement cost of the diesel emission control strategy, including parts and labor.
(C)The warranty must also cover the full repair or replacement cost of ~~to~~ returning ~~the vehicle, equipment, or~~ engine components to the condition they were in prior to the failure, including parts and labor, for damage to the engine ~~or other vehicle components~~ proximately caused by the verified diesel emission control strategy. Repair or replacement of any warranted part, including the engine ~~and other parts~~, must be performed at no charge to the vehicle or engine owner. This includes only those relevant diagnostic expenses in the case in which a warranty claim is valid. The applicant may, at its option, instead pay the fair market value of the ~~vehicle, equipment, or~~ engine prior to the time the failure occurs.
(D)The repair or replacement of any warranted part otherwise eligible for warranty coverage, may be excluded from such warranty coverage at the applicant's discretion if the applicant demonstrates that the diesel emission control strategy, vehicle or engine has been abused, neglected, or improperly maintained, and that such abuse, neglect, or

improper maintenance was the direct cause of the need for the repair or replacement of the part.

(E) Failure of the vehicle or engine owner to ensure scheduled maintenance or to keep maintenance records for the vehicle, equipment, engine, or diesel emission control strategy may, but shall not per se, be grounds for disallowing a warranty claim.

(2) Installation Warranty

(A) A person or company who installs a verified diesel emission control strategy must warrant that the installation is free from defects in workmanship or materials which cause the diesel emission control strategy to fail to conform to the emission control performance level it was verified to or the other requirements of sections 2700-2706 for the minimum time periods shown in Table 5.

(B) For each engine type and size listed in Table 5, the minimum defects warranty period is terminated by that listed event whichever occurs first. The extent of the warranty coverage provided by installers must be the same as the warranty provided by the applicant as established in subsection (a)(1) and the same exclusions must apply.

Table 5. Minimum Warranty Periods

Engine Type	Engine Size	Minimum Warranty Period
On-Road	Light heavy-duty, 70 to 170 hp, Gross Vehicle Weight Rating (GVWR) less than 19,500 lbs.	5 years or 60,000 miles
	Medium heavy-duty, 170 to 250 hp, GVWR from 19,500 lbs. to 33,000 lbs.	5 years or 100,000 miles
	Heavy heavy-duty, exceeds 250 hp, GVWR exceeds 33,000 lbs.	5 years or 150,000 miles
Off-Road (includes portable engines) and Stationary	Under 25 hp, and for constant speed engines rated under 50 hp with rated speeds greater than or equal to 3,000 rpm	3 years or 1,600 hours
	At or above 25 hp and under 50 hp	4 years or 2,600 hours
	At or above 50 hp	5 years or 4,200 hours

(b)(1) Product Warranty Statement. The applicant must furnish a copy of the following statement in the owner's manual.

YOUR WARRANTY RIGHTS AND OBLIGATIONS

(Applicant's name) must warrant the diesel emission control system in the application for which it is sold or leased to be free from defects in design,

materials, workmanship, or operation of the diesel emission control system which cause the diesel emission control system to fail to conform to the emission control performance level it was verified to, or to the requirements in the California Code of Regulations, Title 13, Sections 2700 to 2706, and 2710, for the periods of time listed below, provided there has been no abuse, neglect, or improper maintenance of your diesel emission control system, vehicle or equipment, as specified in the owner's manuals. Where a warrantable condition exists, this warranty also covers the engine ~~other vehicle or equipment parts~~ from damage caused by the diesel emission control system, subject to the same exclusions for abuse, neglect or improper maintenance of your vehicle or equipment. Please review your owner's manual for other warranty information. Your diesel emission control system may include a core part (e.g., particulate filter, diesel oxidation catalyst, selective catalytic reduction converter) as well as hoses, connectors, a back pressure monitor (if applicable), and other emission-related assemblies. Where a warrantable condition exists, (applicant's name) will repair or replace your diesel emission control system at no cost to you including diagnosis, parts, and labor.

WARRANTY COVERAGE:

For a (engine size) engine used in a(n) (type of application) application, the warranty period will be (years or hours or miles of operation) whichever occurs first. If any emission-related part of your diesel emission control system is defective in design, materials, workmanship, or operation of the diesel emission control system thus causing the diesel emission control system to fail to conform to the emission control performance level it was verified to, or to the requirements in the California Code of Regulations, Title 13, Sections 2700 to 2706, and 2710, within the warranty period, as defined above, (Applicant's name) will repair or replace the diesel emission control system, including parts and labor.

In addition, (applicant's name) will replace or repair the ~~vehicle, equipment, or~~ engine components to the condition they were in prior to the failure, including parts and labor, for damage to the engine ~~or other vehicle components~~ proximately caused by the verified diesel emission control strategy. This also includes those relevant diagnostic expenses in the case in which a warranty claim is valid. (Applicant 's name) may, at its option, instead pay the fair market value of the ~~vehicle, equipment, or~~ engine prior to the time the failure occurs.

OWNER'S WARRANTY RESPONSIBILITY

As the (vehicle, engine, equipment) owner, you are responsible for performing the required maintenance described in your owner's manual. (Applicant's name) recommends that you retain all maintenance records and receipts for

maintenance expenses for your vehicle, engine, or equipment, and diesel emission control system. If you do not keep your receipts or fail to perform all scheduled maintenance, (applicant's name) may have grounds to deny warranty coverage. You are responsible for presenting your vehicle, equipment, or engine, and diesel emission control system to a (applicant's name) dealer as soon as a problem is detected. The warranty repair or replacement should be completed in a reasonable amount of time, not to exceed 30 days. If a replacement is needed, this may be extended to 90 days should a replacement not be available, but must be performed as soon as a replacement becomes available.

If you have questions regarding your warranty rights and responsibilities, you should contact (Insert chosen applicant's contact) at 1-800-xxx-xxxx or the California Air Resources Board at 9528 Telstar Avenue, El Monte, CA 91731, or (800) 363-7664, or electronic mail: helpline@arb.ca.gov.

~~(b)~~(2) Installation Warranty Statement. The installer must furnish the owner with a copy of the following statement.

YOUR WARRANTY RIGHTS AND OBLIGATIONS

(Installer's name) must warrant that the installation of a diesel emission control system is free from defects in workmanship or materials which cause the diesel emission control system to fail to conform to the emission control performance level it was verified to, or to the requirements in the California Code of Regulations, Title 13, Sections 2700 to 2706. The warranty period and the extent of the warranty coverage provided by (installer's name) must be the same as the warranty provided by the product manufacturer, and the same exclusions must apply.

OWNER'S WARRANTY RESPONSIBILITY

As the vehicle, engine, or equipment owner, you are responsible for presenting your vehicle, engine, or equipment, and diesel emission control system to (installer's name) as soon as a problem with the installation is detected.

If you have questions regarding your warranty rights and responsibilities, you should contact (Insert chosen installer's contact) at 1-800-xxx-xxxx or the California Air Resources Board at 9528 Telstar Avenue, El Monte, CA 91731, or (800) 363-7664, or electronic mail: helpline@arb.ca.gov.

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§ 2708. Determination of Emissions Reduction.

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§ 2709. In-Use Compliance Requirements

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§ 2710. Verification of Emission Reductions for Alternative Diesel Fuels

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